



Western States Petroleum Association
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President

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Re: Western States Petroleum Association's (WSPA's) Comments on the March 19, 2012 Low Carbon Fuel Standard (LCFS) Crude Oil LCA Public Meeting

This letter is in response to the California Air Resources Board's (ARB's) March 19th public meeting on the "Lifecycle Assessment of Crude Oil Production within the LCFS." WSPA has provided below a number of preliminary comments for your consideration.

WSPA is a non-profit trade association representing twenty-seven companies that explore for, produce, refine, transport, and market petroleum, petroleum products, natural gas and other energy supplies in California and five other western states.

Our overarching comment on the process identified in the workshop for differentiating between crude oils with different carbon intensities, is that it will not result in any reductions in world-wide GHG emissions. Crudes that are not refined in California because of this differentiation will be processed into fuels in other states and countries. The only results will be increased GHG emissions to transport crudes further than economically necessary, and increased costs to California refiners.

WSPA has not altered our core position that there should be no crude differentiation, and want to make clear that our commenting on the workshop contents should in no way be perceived as a shift in our stance.

Further, although ARB staff's workshop presentation indicated "comments made at or in response to this meeting will not be entered into the rulemaking record", which truly made WSPA and its members question the value of providing any comments at all, we nevertheless decided to share several comments with you based on what we heard during the workshop. We ask that ARB reconsider its position and enter all comments in the record. Ours and all others comments, presentations, and meeting documents are "public records, including reports, documentation, and other

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materials related to” the LCFS and ARB’s proposed LCFS amendments and they should all be available to the public as part of ARB’s LCFS administrative record under the California Administrative Procedures Act (*see* CA Gov’t Code, § 11346.5(b)).

We wish to also remind ARB that on 12/29/2011 the United States District Court for the Eastern District of California ruled that the LCFS, “violates the dormant Commerce Clause [of the US Constitution] by impermissibly discriminating against out-of-state and foreign crude oil sources.” This and other rulings are being appealed by ARB. Our comments should not be construed as WSPA endorsement of the legal validity of the current or any amended version of the LCFS at any time.

The first set of comments are generic in scope, and the second set is more specific/technical in nature.

Generic

1. Data Availability

A key element to the success of the OPGEE estimator tool is the availability of field data to support the model algorithms. WSPA, as well as many other stakeholders, have continually indicated a concern to ARB regarding the apparent lack of detailed data with which to populate the tool for a vast number of entries. California Energy Commission (CEC) staff attempted to access available data for many of the needed tool entries. Not only was this data unavailable and highly proprietary for individual oil fields (which is the basis ARB will be utilizing), but the detailed data isn’t available for consolidation into the higher level Market Crude Oil Names (MCON) either. Without such data, any ARB use of the tool would be without factual basis.

WSPA has previously recommended ARB and its consultant better understand the availability of field data early in the tool development process to fully evaluate the practical usefulness of the OPGEE model in a regulatory setting. Based on the fact the concerns about data unavailability have been raised to ARB for over two years now, we are very surprised ARB and the consultant spent a year developing an intricate tool with a wide number of parameters before determining whether, realistically, they will be able to populate and use the tool in any binding ARB regulatory program. It seems the process should have been done in the opposite fashion to see if the general tool concept was realistically achievable in the current timeframe for rulemaking and compliance.

The number of inputs to the model implies a high degree of accuracy, however because this data does not exist, this is incorrect. The ability to gather reliable information about crude oil production in many parts of the world is limited and poor quality affects comparison of crude pathways. ARB staff needs to provide a valid sensitivity analysis related to data uncertainty regarding crude production, clearly showing the wide range of impact on gasoline and diesel carbon intensities.

2. Representative Data

WSPA is equally concerned with the resulting over-reliance on data from California in the development of OPGEE. Use of regionally-specific data could cause an imbalance in tool results during application. For example, the production flow/methods data are not nearly complete enough to use the model for a broad range of crudes from across the world where there is much more complexity and differing production methodologies. The tool should be based on a balanced input of data that are representative of crudes produced in all regions.

In addition, while ARB staff has expressed their view that the prior “crude basket” approach was unfair to some producers not included in the basket due to the potentially higher CI levels of the California crudes, we believe this new approach with the use of the tool is also unfair to California producers. This is because their data is available and very detailed – partly as a result of the Mandatory Reporting Rule, whereas the majority of worldwide crude oils do not have the same level of transparency and verifiability. This does not provide a level playing field for California crudes versus world wide crudes.

Moreover, where data is lacking for worldwide crudes, defaults, as discussed below, will likely inappropriately burden imported crudes with higher CIs. Frankly, the tool, as proposed, is not equitable to either California or worldwide production.

WSPA requests that ARB promptly and publically identify the data sources to be used by the consultant and ARB.

3. Use of Conservative Default Values Where Data is Unavailable

WSPA does not support the use of conservative default values. Regulations that are based on the best available science require a good faith effort to develop the most accurate estimates possible; therefore, any default values must be the most reasonable estimates based on available data.

At best, the OPGEE tool suffers from the fact that it incorporates a level of detail that is far in excess of the available data. This creates the illusion that the model is more accurate than it really is (or that is even possible to be). The large uncertainty introduced with the use of default values again brings into question the practical usefulness and validity of the OPGEE tool in a regulatory setting.

The problems created by the dependence on defaults are magnified by staff’s proposal to use conservative defaults. This proposal would serve to intentionally bias the tool results to the high side; as if the potential inaccuracies created by the reliance on defaults wasn’t bad enough, staff proposes to guarantee that the results will be inaccurate in a specific direction. Moreover, conservative defaults that can be replaced in some cases but not others will result in the inequitable treatment of crudes.

The use of conservative default values will again disadvantage out-of-state producers compared with California producers. If, as stated in the workshop, ARB has the notion the use of conservative default values will lead to other locations and operators around the world altering their practices to a) begin to produce more detailed data, and b) subsequently begin to reduce their crude CI as a consequence, we simply do not think that position is factually supportable and we believe ARB is overreaching its legal authority to regulate crude oil imports into California, and therefore this staff concept results in an invalid regulatory approach.

Further, we believe the way ARB is moving forward with this regulatory element in a staged fashion will have compliance implications. Conservative defaults create the potential for some producers to claim that data they bring to the ARB in the future represents “new” operations that qualify for a reduction from the conservative number used for their product in the baseline. This would then disadvantage producers that provided data from the beginning.

To understand the model input, we need to see the model paired with draft “available” and default input values at least for the crudes used by refiners in California in the 2010 baseline year. WSPA also requests that ARB, when they create the 2010 crude oil baseline, release to the public which of the 19 parameters have data available for the crudes that will be part of the baseline, and which will staff need to use default values.

Finally, we also ask ARB to clearly and promptly delineate the basis for the default values.

4. Oil Sands Evaluation Being Completed Later

WSPA is concerned with the fact ARB will be including detailed information from the “oil sands” at a later date due to the complexity of the crude production methods, and in the interim is trying to decide whether to use an altered form of GH-Genius while the consultant works on an oil sands module for the tool.

Again, we do not believe a step-wise, constant altering of a tool, is an acceptable process. ARB staff needs to address how it plans to update the model when input values are based on data at a given point in time for a given crude. Staff will also need to address how often these input variables will be refreshed due to changes in crude production.

AS WSPA has repeatedly recommended, it would be better for ARB to develop a complete tool after a requisite robust effort with sufficient time devoted to the issues, due to the potential for a significant direct impact on the crude oil market.

5. Accounting for Crude Shuffling

The Stanford Scoping Plan states that the OPGEE model’s purpose will be to provide “detailed assessment of GHG impacts of differing imported crudes oil streams”. To accomplish that goal, the effects of displacing crude oil as a result of one jurisdiction rejecting a crude oil stream must be considered. Without this key consideration, impacts of potential “crude shuffling” would not be properly accounted for in the assessment of imported crude streams.

Specific

6. Emission Factors

Based upon references that were provided in the Stanford Scoping Plan, there is concern that emission factor algorithms may be in conflict with established emission estimating techniques (EETs) including those EETs in ARB's Mandatory Reporting Regulation (MRR) program. WSPA suggests that data from the MRR program be used to validate the appropriate parts of the OPGEE.

7. Process Categories and Equipment Types

- A review of process categories and equipment types shows that the OPGEE may fall short in representing the uniqueness and complexity of California oil & gas production facilities. Specifically, the draft flow charts do not consider process stream characteristics or the nature of crude oil and associated gas inherent to California production.

- It is unclear how (or if) the model apportions emissions between the various products (gas, NGL, and crude) from a more complex production and marketing scenario. The handling of the co-produced products and apportionment amongst the co-products is fundamental. It does not appear capable of handling gas condensate production.
- As stated above, the tool overriding input and defaulting to assumed values is not appropriate or correct. For example, if you do not choose “down hole pump” as a production method the model defaults to a reservoir pressure of 1600 psi and 5,000 feet well depth.
- The processing practices do not appear to be completed, and do not account for more complex processes (i.e., NGL blending, gas plant, etc.)
- The number of wells is not a good indication of surface disturbance or land use emissions. One needs to account for multi-well pads or built-up gravel pads with no surface disturbance.
- The three choices for ecosystem carbon richness are not adequate.
- The model appears to be insensitive to gas lifting, which does not make sense.
- There needs to be much better descriptions for data that needs to be entered (e.g., water injection - Is that intended to be inclusive of produced water, or make-up water as well?)

Conclusion

Overall, our review of the tool is hampered because it is not complete. For a thorough technical assessment, we would need a full report of the algorithms and assumptions. Once these are available and the tool is technically complete, adequate time must then be allowed for a proper critique. The schedule ARB proposed for incorporating the tool will likely not allow sufficient review.

In closing, WSPA once again is disappointed that ARB has decided to pursue a crude differentiation approach. We are concerned that ARB has spent a substantial amount of its time and budget on trying to develop an overly complicated crude oil CI tool that will result in bias and unfair treatment of data-rich sources versus data-poor worldwide sources. Based on industry experience, we believe this effort will not be scientifically valid, be lacking in substantial amounts of data that will necessitate the use of default values, and will as a consequence contain unverifiable data that populates the tool.

WSPA and its members reiterate all of our other technical, policy and legal concerns about this approach. In particular, we note that this approach involves determining CI values for crude oil based on the state or country of origin of the crude oil, production practices in other states and countries, and transportation of crude oil to California. This approach continues to discriminate against out-of-state and foreign crude oil sources, and thus continues to violate the dormant Commerce Clause of the U.S. Constitution.

Sincerely,

A handwritten signature in blue ink that reads "Cathy A. Boyd". The signature is fluid and cursive, with the first name "Cathy" being the most prominent.

c.c. C. Marvin - ARB
M. Waugh - ARB
F. Vergara - ARB
J. Curtis - ARB
J. Duffy - ARB
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